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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/002,461

11/01/2001

Keith R. Slavin

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15747 7590 07/13/2011  
Dorsey & Whitney LLP-IP Dept.-MTI  
Columbia Center  
701 5th Avenue, suite 6100  
Seattle, WA 98104-7043

EXAMINER

ELMORE, REBA I

ART UNIT

PAPER NUMBER

2189

MAIL DATE

DELIVERY MODE

07/13/2011

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* KEITH R. SLAVIN

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Appeal 2009-011533  
Application 10/002,461  
Technology Center 2100

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Before DENISE M. POTHIER, JEFFREY S. SMITH, and ERIC B. CHEN,  
*Administrative Patent Judges.*

SMITH, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-38 and 41-44, which are all the claims remaining in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

*Invention*

Appellant's invention relates to a method of inputting a comparand word to a plurality of hash circuits, each hash circuit being responsive to a different portion of the comparand word. The hash circuits output a hash signal which is used to enable or precharge portions of a content addressable memory (CAM). The comparand word is also inputted into the CAM. The CAM compares the comparand word in the precharged portions of the CAM and outputs information responsive to the comparing step. When used to process Internet addresses, the information output may be port information or an index from which port information may be located. A circuit is also disclosed as well as a method of initializing the circuit. Abstract.

*Representative Claim*

1. A method, comprising:
  - inputting an input word to a plurality of hash circuits, each hash circuit being responsive to a different portion of said input word;
  - outputting a hash signal from each hash circuit;
  - enabling portions of a CAM in response to said hash signals;
  - inputting said input word to said CAM;
  - comparing said input word in the enabled portions of said CAM; and
  - outputting information responsive to said comparing.

*Examiner's Rejections*

Claims 1-38 stand rejected under 35 U.S.C. § 112 first paragraph as failing to comply with the written description requirement.

Claims 1-3, 5, 8-10, 12, 15-17, 19, 22, 23, 25, and 28-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hariguchi (US 6,665,297 B1) and Cheriton (US 7,002,965 B1).

The rejections to claims 41-44 under 35 U.S.C. § 112 first paragraph and § 102, and the rejection to claims 4, 6, 7, 11, 13, 14, 18, 20, 21, 24, 26, 27, and 34-38 under 35 U.S.C. § 103(a) have been withdrawn. Ans. 2.

### *Claim Groupings*

Based on Appellant's arguments in the Appeal Brief, we will decide the appeal on the basis of claims 1 and 19 for the obviousness rejection. *See* 37 C.F.R. § 41.37(c)(1)(vii).

### ISSUES

(1) Has Appellant shown that the Examiner erred in finding that claims 1-38 fail to satisfy the written description requirement?

(2) Has Appellant shown that the Examiner erred in finding that the combination of Hariguchi and Cheriton teaches "enabling portions of a CAM in response to said hash signals" as recited in claim 1?

### FINDINGS OF FACT

#### *Cheriton*

1. Cheriton teaches a method for using ternary and binary content-addressable memory stages to classify packets. Title.

2. If a matching hash directory entry is found by hash function 304, the handling specified by this directory entry is used by one or more CAMs 305 to generate one or more classification indications and overriding the relevant handling that may have been determined by earlier packet classification mechanisms. Col. 7, ll. 7-12.

## PRINCIPLES OF LAW

### *Written Description*

To comply with the “written description” requirement of 35 U.S.C. § 112, first paragraph, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the “written description” inquiry, whatever is now claimed. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991).

### *Claim Interpretation*

During examination, claims are to be given their broadest reasonable interpretation consistent with the specification, and the language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (citations omitted). The Office must apply the broadest reasonable meaning to the claim language, taking into account any definitions presented in the specification. *Id.* (citations omitted).

## ANALYSIS

*Rejection of claims 1-38 under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement*

The Examiner finds that “[t]he delay circuit appears to be necessary for the enabling step of the use of the CAM in the independent claims . . . .”

Ans. 9. The Examiner also finds that the delay circuit recited in claim 4 is shown as a black box in Figures 1 and 5 of the Specification. The Examiner concludes that the Specification does not provide any details for one of ordinary skill in the art to make and use the delay circuit without undue experimentation. Ans. 3-4.

The Examiner has not made a rejection under 35 U.S.C. § 112, first paragraph for lack of enablement. Nor has the Examiner considered the *Wands* factors to establish that one of ordinary skill in the art could not make and use the delay circuit without undue experimentation. *In re Wands*, 858 F.2d 731 (Fed. Cir. 1988). The Examiner relies on *Automotive Technologies International, Inc. v. BMW of North America, Inc.*, 501 F.3d 1274 (Fed. Cir. 2007) to support the written description rejection. *See* Ans. 4-5. However, *Automotive Technologies* discusses enablement, not written description. The Examiner has also not explained how *Automotive Technologies* applies to the written description requirement.

The Examiner’s rejection is for lack of written description. The written description requirement is satisfied when an applicant conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the claimed invention. The Examiner has not presented evidence to show that Appellant was not in possession of the

inventions claimed in independent claims 1, 8, 15, 22, 28, and 34 and their dependent claims at the time of filing.

We do not sustain the rejection of claims 1-38 under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement.

*Rejection of claims 1-3, 8-10, 12, 15, 16, 22, 23, and 28-33 under 35 U.S.C. § 103(a)*

Appellant contends that the cited portions of Cheriton do not teach using hashing signals to enable portions of a CAM and instead teach the entire CAM being responsive to hash signals. App. Br. 12. The Examiner finds that portions of the CAM can be a subset of addresses in the CAM or the entire CAM (Ans. 10), a position that we find reasonable.

Appellant further contends that Cheriton: (1) does not say or suggest enabling or precharging the CAM using the hash function output and (2) does not say or suggest enabling or precharging one of several CAMs 305. Reply Br. 8. The Examiner finds that the CAM addresses of Cheriton are enabled in direct response to the output of the hash directory. Ans. 10. Appellant has not provided evidence or a persuasive argument to rebut the Examiner's finding that Cheriton teaches enabling portions of a CAM in response to hash signals. Further, Appellant's contention that Cheriton does not teach enabling the CAM using the hash function is contradicted by Appellant's earlier contention that Cheriton teaches the entire CAM is responsive to hash signals (App. Br. 12). Appellant has also not provided evidence or a persuasive argument to distinguish precharging from enabling.

Therefore, we find that Cheriton teaches “enabling portions of a CAM in response to said hash signals” as recited in claim 1.

We sustain the rejection of claim 1 under 35 U.S.C. § 103(a). Appellant has not presented arguments for separate patentability of claims 2, 3, 8-10, 12, 15, 16, 22, 23, and 28-33, which thus fall with claim 1.

*Rejection of claims 5, 17, 19, and 25 under 35 U.S.C. § 103(a)*

Appellant contends that each of the dependent claims 5, 17, 19, and 25 recites precharging portions of the CAM. App. Br. 13; Reply Br. 9. However, claims 5 and 17 do not recite precharging portions of the CAM. Appellant’s argument is not commensurate with the scope of claims 5 and 17.

Appellant contends that Hariguchi does not teach enabling or precharging portions of a CAM. App. Br. 13; Reply Br. 9. However, Cheriton teaches enabling or precharging portions of a CAM as discussed in the analysis of claim 1.

Therefore, we sustain the rejection of claims 5, 17, 19, and 25 under 35 U.S.C. § 103.

## CONCLUSIONS OF LAW

(1) Appellant has shown that the Examiner erred in finding that claims 1-38 fail to satisfy the written description requirement.

(2) Appellant has not shown that the Examiner erred in finding that the combination of Hariguchi and Cheriton teaches “enabling portions of a CAM in response to said hash signals” as recited in claim 1.



DECISION

The rejection of claims 1-38 under 35 U.S.C. § 112 first paragraph as failing to comply with the written description requirement is reversed.

The rejection of claims 1-3, 5, 8-10, 12, 15-17, 19, 22, 23, 25, and 28-33 under 35 U.S.C. § 103(a) as being unpatentable over Hariguchi and Cheriton is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED-IN-PART

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